



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2012-0420; Directorate Identifier 2011-NM-284-AD; Amendment 39-17315; AD 2013-01-01]

RIN 2120-AA64

Airworthiness Directives; Bombardier, Inc. Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: We are superseding an existing airworthiness directive (AD) for certain Bombardier, Inc. Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes. That AD currently requires revising the airplane flight manual, deactivating and removing certain hydraulic accumulators, inspecting for cracks on accumulators and screw caps, and replacing certain accumulators. For certain airplanes, this new AD reduces the compliance time for a certain replacement. This AD was prompted by reports of on-ground hydraulic accumulator screw cap/end cap failure. We are issuing this AD to detect and correct hydraulic accumulator screw cap/end cap failure, which could result in the loss of the associated hydraulic system and high-energy impact damage to adjacent systems and structure, and consequent loss of control of the airplane.

DATES: This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain other publications listed in this AD as of December 22, 2011 (76 FR 71241, November 17, 2011).

The Director of the Federal Register approved the incorporation by reference of certain other publications listed in this AD as of November 4, 2010 (75 FR 64636, October 20, 2010).

ADDRESSES: You may examine the AD docket on the Internet at <http://www.regulations.gov> or in person at the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC.

FOR FURTHER INFORMATION CONTACT: Cesar Gomez, Aerospace Engineer, Airframe and Mechanical Systems Branch, ANE-171, FAA, New York Aircraft Certification Office (ACO), 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; telephone (516) 228-7318; fax (516) 794-5531.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM was published in the Federal Register on April 19, 2012 (77 FR 23420), and proposed to supersede

AD 2011-23-08, Amendment 39-16859 (76 FR 71241, November 17, 2011), which superseded AD 2010-22-02, Amendment 39-16481 (75 FR 64636, October 20, 2010).

That NPRM proposed to correct an unsafe condition for the specified products. Transport Canada Civil Aviation, which is the aviation authority for Canada, has issued Canadian Airworthiness Directive CF-2010-24, dated August 3, 2010 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for the specified products. The MCAI states:

Seven cases of on-ground hydraulic accumulator screw cap/end cap failure have been experienced on CL-600-2B19 aeroplanes, resulting in the loss of the associated hydraulic system and high-energy impact damage to adjacent systems and structure. The lowest number of flight cycles accumulated at the time of failure, to date, has been 6991 flight cycles.

The part numbers (P/N) of the accumulators currently installed on CL-600-2B19 aeroplanes are 601R75138-1 (08-60163-001 or 08-60163-002) [Hydraulic System No. 1, Hydraulic System No. 2, Inboard Brake and Outboard Brake accumulators] and 601R75138-3 (08-60164-001 or 08-60164-002) [Hydraulic System No. 3 accumulator].

A detailed analysis of the calculated line of trajectory of a failed screw cap/end cap for each of the accumulators has been conducted, resulting in the identification of several areas where systems and/or structural components could potentially be damaged. Although all of the failures to date have occurred on the ground, an in-flight failure affecting such components could potentially have an adverse effect on the controllability of the aeroplane.

This [Canadian] directive gives instructions to amend the Airplane Flight Manual (AFM), remove two accumulators (Hydraulic System No. 2 and No. 3) from the aeroplane and conduct repetitive ultrasonic inspections [for cracks] of the Hydraulic System No. 1, Inboard Brake and Outboard Brake accumulators that are not identified by the letter “T”

after the serial number (S/N) on the identification plate for cracks until they are replaced by new accumulators P/N 601R75139-1 (11093-4).

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Comments

We gave the public the opportunity to participate in developing this AD. We considered the comments received.

Request to Remove Compliance Time

Comair, Inc. requested that we remove paragraph (n)(2) from the NPRM (77 FR 23420, April 19, 2012). The commenter stated its understanding that the main reason for the change to paragraph (n) of the NPRM is to add paragraph (n)(2) with the intent to reduce the compliance schedule. However, Comair, Inc. reasoned that, based on the timeline for issuance of a final rule, the 60-day compliance time that was added to paragraph (n)(2) of the NPRM will likely extend the compliance time by three or more months beyond the existing compliance time for that required action (which is required by AD 2011-23-08, Amendment 39-16859 (76 FR 71241, November 17, 2011)), instead of reducing the compliance time.

We disagree with the request to remove paragraph (n)(2) of the NPRM (77 FR 23420, April 19, 2012) from the final rule. Paragraph (n) of this AD indicates that the required action must be done at the later of the times in paragraphs (n)(1) and (n)(2) of this AD. Paragraph (n)(1) of this AD includes the phrase, “whichever occurs first,” which requires operators to perform the action at the earlier of the times specified in that paragraph. Those times are tied to the effective date of AD 2011-23-08, Amendment

39-16859 (76 FR 71241, November 17, 2011), and are restated from that AD. Therefore, we added paragraph (n)(2) in the NPRM as a grace period for operators that may already have exceeded the compliance time in paragraph (n)(1) of this AD.

We find that the reduced compliance time is necessary to address the identified unsafe condition in a timely manner, and that a grace period is necessary to prevent unintentionally grounding airplanes. We have not changed the final rule in this regard.

Request to Revise Paragraph (l) of the NPRM (77 FR 23420, April 19, 2012)

Comair, Inc. requested that we revise paragraph (l) of the NPRM (77 FR 23420, April 19, 2012) to remove the phrase, “with reduced compliance time for paragraph (n).” Comair, Inc. considered this phrase to be an error and requested that further explanation be provided if the phrase is intended to be included.

We agree with the commenter’s request. We note that both paragraphs (l) and (m) of the NPRM (77 FR 23420, April 19, 2012) contained similar phrases. However, since no reference to a reduced compliance time should be included in those paragraphs, we have deleted the phrases from both paragraphs (l) and (m) of this final rule.

Request to Remove References to a Certain AD

Air Wisconsin Airlines Corporation (Air Wisconsin) requested that we revise the NPRM (77 FR 23420, April 19, 2012) to remove certain AD references specified in paragraphs (g), (h), (i), (j), and (k) of the NPRM. Air Wisconsin stated that those paragraphs incorrectly refer to a previously superseded AD (AD 2010-22-02, Amendment 39-16481 (75 FR 64636, October 20, 2010)), and should instead be replaced

with the most recent AD being superseded (that is, AD 2011-23-08, Amendment 39-16859 (76 FR 71241, November 17, 2011)).

We partially agree with the commenter's request. We revised the introductory statement of paragraphs (g), (h), (i), (j), and (k) of this final rule to specify that the requirements of those paragraphs are restated from AD 2011-23-08, Amendment 39-16859 (76 FR 71241, November 17, 2011).

However, we have not changed the compliance times specified (or referenced) in paragraphs (g), (h), (i), (j), and (k) of this AD. The actions required by those paragraphs were required in AD 2010-22-02, Amendment 39-16481 (75 FR 64636, October 20, 2010), and the compliance times for those actions are based on the effective date of that AD. Those restated compliance times have not been changed in this final rule.

Request to Clarify Service Information Reference

Air Wisconsin requested that we revise paragraphs (h) and (i) of the NPRM (77 FR 23420, April 19, 2012) to clarify the added reference to revised service information. The commenter noted that those paragraphs state there is revised service information. Air Wisconsin questioned whether the revised service information is from AD 2010-22-02, Amendment 39-16481 (75 FR 64636, October 20, 2010); or AD 2011-23-08, Amendment 39-16859 (76 FR 71241, November 17, 2011).

We agree that clarification is necessary. We inadvertently specified that revised service information is included in paragraphs (h) and (i) of the NPRM (76 FR 71241, November 17, 2011), when, in fact, no revised service information was included.

Therefore, we have removed those references from paragraphs (h) and (i) of this final rule.

Request to Include the Latest Temporary Revision (TR)

Air Wisconsin requested that we revise the NPRM (77 FR 23420, April 19, 2012) to include the latest TR to the Canadair Regional Jet AFM, CSP A-012. The commenter noted that paragraph (g) of the NPRM pertains to Canadair Regional Jet TR RJ/186-1, dated August 24, 2010. Air Wisconsin requested that we add Canadair Regional Jet TR RJ/186-2, dated July 7, 2011, as an approved method.

We agree with the commenter's request, and have included Canadair Regional Jet TR RJ/186-2, dated July 7, 2011, in paragraph (g) of this final rule and in Note 1 to paragraph (g) of this final rule.

Explanation of Changes Made to this AD

We have removed tables 1, 2, 3, 4, and 5 of this final rule. Instead, we have included the information from those tables in the subparagraphs of paragraphs (j)(1), (j)(2), (m), and (o)(3) of this final rule.

Conclusion

We reviewed the available data, including the comments received, and determined that air safety and the public interest require adopting the AD with the changes described previously—except for minor editorial changes. We have determined that these changes:

- Are consistent with the intent that was proposed in the NPRM (77 FR 23420, April 19, 2012) for correcting the unsafe condition; and

- Do not add any additional burden upon the public than was already proposed in the NPRM (77 FR 23420, April 19, 2012).

Costs of Compliance

We estimate that this AD will affect about 605 products of U.S. registry.

The actions that are required by AD 2011-23-08, Amendment 39-16859 (76 FR 71241, November 17, 2011), and retained in this AD take about 33 work-hours per product, at an average labor rate of \$85 per work-hour. Required parts cost about \$3,054 per product. Based on these figures, the estimated cost of the currently required actions is \$5,859 per product.

The new requirements of this AD add no additional economic burden.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone (800) 647-5527) is in the ADDRESSES section.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by removing airworthiness directive (AD) 2011-23-08, Amendment 39-16859 (76 FR 71241, November 17, 2011), and adding the following new AD:

2013-01-01 Bombardier, Inc.: Amendment 39-17315. Docket No. FAA-2012-0420; Directorate Identifier 2011-NM-284-AD.

(a) Effective Date

This airworthiness directive (AD) becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD supersedes AD 2011-23-08, Amendment 39-16859 (76 FR 71241, November 17, 2011).

(c) Applicability

This AD applies to Bombardier, Inc. Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes, certificated in any category, serial numbers 7003 and subsequent.

(d) Subject

Air Transport Association (ATA) of America Code 29, Hydraulic Power; 32, Landing Gear.

(e) Reason

This AD was prompted by reports of on-ground hydraulic accumulator screw cap/end cap failure. We are issuing this AD to detect and correct hydraulic accumulator screw cap/end cap failure, which could result in the loss of the associated hydraulic system and high-energy impact damage to adjacent systems and structure, and consequent loss of control of the airplane.

(f) Compliance

You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

(g) Retained Airplane Flight Manual (AFM) Revision, with Revised Service Information

This paragraph restates the AFM revision required by paragraph (g) of AD 2011-23-08, Amendment 39-16859 (76 FR 71241, November 17, 2011), with revised service information. Within 30 days after November 4, 2010 (the effective date of AD 2010-22-02, Amendment 39-16481 (75 FR 64636, October 20, 2010)), revise the Limitations section, Normal Procedures section, and Abnormal Procedures section of the Canadair Regional Jet AFM, CSP A-012, by incorporating Canadair Regional Jet Temporary Revision (TR) RJ/186-1, dated August 24, 2010; or Canadair Regional Jet TR RJ/186-2, dated July 7, 2011; into the applicable section of Canadair Regional Jet AFM, CSP A-012. Thereafter, except as provided by paragraph (p) of this AD, no alternative

actions specified in Canadair Regional Jet TR RJ/186-1, dated August 24, 2010; or Canadair Regional Jet TR RJ/186-2, dated July 7, 2011; may be approved.

Note 1 to paragraph (g) of this AD: The actions required by paragraph (g) of this AD may be done by inserting a copy of Canadair Regional Jet TR RJ/186-1, dated August 24, 2010; or Canadair Regional Jet TR RJ/186-2, dated July 7, 2011; into the applicable section of the Canadair Regional Jet AFM, CSP A-012. When one of these TRs has been included in the general revisions of this AFM, the general revisions may be inserted into this AFM, and the TR removed, provided that the relevant information in the general revision is identical to that in Canadair Regional Jet TR RJ/186-1, dated August 24, 2010; or Canadair Regional Jet TR RJ/186-2, dated July 7, 2011.

(h) Retained Deactivation of the Hydraulic System No. 3 Accumulator

This paragraph restates the deactivation required by paragraph (h) of AD 2011-23-08, Amendment 39-16859 (76 FR 71241, November 17, 2011). Within 250 flight cycles after November 4, 2010 (the effective date of AD 2010-22-02, Amendment 39-16481 (75 FR 64636, October 20, 2010)), deactivate the hydraulic system No. 3 accumulator, in accordance with Part A of the Accomplishment Instructions of Bombardier Alert Service Bulletin A601R-29-031, Revision A, dated March 26, 2009. Doing the removal of the hydraulic system No. 3 accumulator in paragraph (l) of this AD terminates the requirements of this paragraph. The actions in this paragraph apply to all accumulators in hydraulic system No. 3.

(i) Retained Removal of the Hydraulic System No. 2 Accumulator

This paragraph restates the removal required by paragraph (i) of AD 2011-23-08, Amendment 39-16859 (76 FR 71241, November 17, 2011). Within 500 flight cycles after November 4, 2010 (the effective date of AD 2010-22-02, Amendment 39-16481 (75 FR 64636, October 20, 2010)), remove the hydraulic system No. 2 accumulator, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 601R-29-032, Revision A, dated January 26, 2010. The actions in this paragraph apply to all accumulators in hydraulic system No. 2.

(j) Retained Initial and Repetitive Ultrasonic Inspections of Hydraulic System No. 1, Inboard Brake and Outboard Brake Accumulators, with Revised Service Information

This paragraph restates the initial and repetitive ultrasonic inspections required by paragraph (j) of AD 2011-23-08, Amendment 39-16859 (76 FR 71241, November 17, 2011), with revised service information. For hydraulic system No. 1, inboard brake and outboard brake accumulators having part number (P/N) 601R75138-1 (08-60163-001 or 08-60163-002): At the applicable compliance times specified in paragraph (k) of this AD, do the inspections required by paragraphs (j)(1) and (j)(2) of this AD. Repeat the inspections for each accumulator having P/N 601R75138-1 (08-60163-001 or 08-60163-002) thereafter at intervals not to exceed 500 flight cycles until the replacement specified in this paragraph is done, or the replacement specified in paragraph (m) of this AD is done. If any crack is found, before further flight, replace the accumulator with a new accumulator having P/N 601R75138-1 (08-60163-001 or 08-60163-002) and having the letter “T” after the serial number on the identification plate, in accordance with the

Accomplishment Instructions of the applicable service bulletin specified in paragraphs (j)(1)(i), (j)(1)(ii), (j)(2)(i), and (j)(2)(ii) of this AD.

Note 2 to paragraph (j) of this AD: For any accumulator having P/N 601R75138-1 (08-60163-001 or 08-60163-002) and the letter “T” after the serial number on the identification plate, or for any accumulator having a part number that is not listed in paragraph (j) of this AD, the inspection specified in paragraph (j) of this AD is not required.

(1) Do an ultrasonic inspection for cracks on each accumulator, in accordance with Part B of the Accomplishment Instructions of the applicable service bulletin specified in paragraphs (j)(1)(i) and (j)(1)(ii) of this AD.

(i) For the hydraulic system No. 1 accumulator: Bombardier Alert Service Bulletin A601R-29-029, Revision B, dated May 11, 2010, including Appendix A, dated October 18, 2007.

(ii) For the inboard and outboard brake accumulators: Bombardier Alert Service Bulletin A601R-32-103, Revision D, dated May 11, 2010, including Appendix A, Revision A, dated October 18, 2007.

(2) Do an ultrasonic inspection for cracks on the screw cap, in accordance with the Accomplishment Instructions of the applicable service specified in paragraphs (j)(2)(i) and (j)(2)(ii) of this AD.

(i) For the hydraulic system No. 1 accumulator: Bombardier Service Bulletin 601R- 29-033, Revision A, dated May 11, 2010, including Appendix A, dated May 5, 2009.

(ii) For the inboard and outboard brake accumulators: Bombardier Service Bulletin 601R- 32-106, including Appendix A, Revision A, dated May 11, 2010.

(k) Retained Compliance Times for the Ultrasonic Inspections of Hydraulic System No. 1, Inboard Brake and Outboard Brake Accumulators

This paragraph restates the compliance times required by paragraph (k) of AD 2011-23-08, Amendment 39-16859 (76 FR 71241, November 17, 2011). For hydraulic system No. 1 inboard brake, and outboard brake accumulators having P/N 601R75138-1 (08-60163-001 or 08-60163-002): Do the inspections specified in paragraph (j) of this AD at the applicable time in paragraphs (k)(1), (k)(2), and (k)(3) of this AD.

(1) For any accumulator not having the letter “T” after the serial number on the identification plate and with more than 4,500 flight cycles on the accumulator as of November 4, 2010 (the effective date of AD 2010-22-02, Amendment 39-16481 (75 FR 64636, October 20, 2010)): Inspect within 500 flight cycles after November 4, 2010 (the effective date of AD 2010-22-02).

(2) For any accumulator not having the letter “T” after the serial number on the identification plate and with 4,500 flight cycles or less on the accumulator as of November 4, 2010 (the effective date of AD 2010-22-02, Amendment 39-16481 (75 FR 64636, October 20, 2010)): Inspect prior to the accumulation of 5,000 flight cycles on the accumulator.

(3) If it is not possible to determine the flight cycles accumulated for any accumulator not having the letter “T” after the serial number on the identification plate: Inspect within 500 flight cycles after November 4, 2010 (the effective date of

AD 2010-22-02, Amendment 39-16481 (75 FR 64636, October 20, 2010)).

(l) Retained Removal of the Hydraulic System No. 3 Accumulator

This paragraph restates the removal required by paragraph (o) of AD 2011-23-08, Amendment 39-16859 (76 FR 71241, November 17, 2011). Within 1,000 flight cycles after December 22, 2011 (the effective date of AD 2011-23-08), remove the hydraulic system No. 3 accumulator, in accordance with Part B of the Accomplishment Instructions of Bombardier Alert Service Bulletin A601R-29-031, Revision A, dated March 26, 2009. Doing the action in this paragraph terminates the requirements of paragraph (h) of this AD.

(m) Retained Replacement of the Hydraulic System No. 1, Inboard Brake and Outboard Brake Accumulators

This paragraph restates the replacement required by paragraph (p) of AD 2011-23-08, Amendment 39-16859 (76 FR 71241, November 17, 2011). Within 4,000 flight cycles or 24 months after December 22, 2011 (the effective date of AD 2011-23-08), whichever occurs first, replace any hydraulic system No. 1, inboard brake or outboard brake accumulator having P/N 601R75138-1 (08-60163-001 or 08-60163-002), with a new accumulator having P/N 601R75139-1 (11093-4), in accordance with the Accomplishment Instructions of the applicable service bulletin identified in paragraphs (m)(1) through (m)(4) of this AD. Doing the action in this paragraph terminates the requirement for the inspections in paragraph (j) of this AD for that accumulator. As of December 22, 2011 (the effective date of AD 2011-23-08), use

only the applicable service bulletin specified in paragraph (m)(2) or (m)(4) of this AD.

(1) For the hydraulic system No. 1 accumulator: Bombardier Service Bulletin 601R-29-035, dated May 11, 2010.

(2) For the hydraulic system No. 1 accumulator: Bombardier Service Bulletin 601R-29-035, Revision A, dated December 8, 2010.

(3) For the inboard and outboard brake accumulators: Bombardier Service Bulletin 601R-32-107, Revision A, dated June 17, 2010.

(4) For the inboard and outboard brake accumulators: Bombardier Service Bulletin 601R-32-107, Revision B, dated December 8, 2010.

(n) Retained Action for Airplanes on Which Bombardier Service Bulletin 601R-29-035, Dated May 11, 2010, is Done and Reducer Having P/N MS21916D8-6 is Installed, with Revised Compliance Time

This paragraph restates the action required by paragraph (q) of AD 2011-23-08, Amendment 39-16859 (76 FR 71241, November 17, 2011), with reduced compliance time. For airplanes on which Bombardier Service Bulletin 601R-29-035, dated May 11, 2010, is done, and on which a reducer having P/N MS21916D8-6 is installed: At the later of the times specified in paragraphs (n)(1) and (n)(2) of this AD, replace the reducer of the hydraulic system No. 1 with a new reducer, in accordance with Part B of the Accomplishment Instructions of Bombardier Service Bulletin 601R-29-035, Revision A, dated December 8, 2010.

(1) Within 1,200 flight cycles or 8 months after December 22, 2011 (the effective date of AD 2011-23-08, Amendment 39-16859 (76 FR 71241, November 17, 2011)), whichever occurs first.

(2) Within 60 days after the effective date of this AD.

(o) Retained Credit for Previous Actions

(1) This paragraph provides credit for deactivating the hydraulic system No. 3 accumulator required by paragraph (h) of this AD, if the deactivation was performed before November 4, 2010 (the effective date of AD 2010-22-02, Amendment 39-16481 (75 FR 64636, October 20, 2010)), using Bombardier Alert Service Bulletin A601R-29-031, dated December 23, 2008, which is not incorporated by reference in this AD.

(2) This paragraph provides credit for removing the hydraulic system No. 2 accumulator required by paragraph (i) of this AD, if the removal was performed before November 4, 2010 (the effective date of AD 2010-22-02, Amendment 39-16481 (75 FR 64636, October 20, 2010)), using Bombardier Service Bulletin 601R-29-032, dated November 12, 2009, which is not incorporated by reference in this AD.

(3) This paragraph provides credit for an ultrasonic inspection for cracks required by paragraph (j) of this AD, if the ultrasonic inspection was performed before November 4, 2010 (the effective date of AD 2010-22-02, Amendment 39-16481 (75 FR 64636, October 20, 2010)), using the applicable service bulletin identified in paragraphs (o)(3)(i) through (o)(3)(viii) of this AD; as applicable; which are not incorporated by reference in this AD.

(i) Bombardier Alert Service Bulletin A601R-29-029, dated October 18, 2007.

(ii) Bombardier Alert Service Bulletin A601R-29-029, Revision A, dated November 12, 2009.

(iii) Bombardier Alert Service Bulletin A601R-32-103, dated November 21, 2006.

(iv) Bombardier Alert Service Bulletin A601R-32-103, Revision A, dated March 7, 2007.

(v) Bombardier Alert Service Bulletin A601R-32-103, Revision B, dated October 18, 2007.

(vi) Bombardier Alert Service Bulletin A601R-32-103, Revision C, dated February 26, 2009.

(vii) Bombardier Service Bulletin 601R-29-033, dated May 5, 2009.

(viii) Bombardier Service Bulletin 601R-32-106, dated May 5, 2009.

(4) This paragraph provides credit for removing the hydraulic system No. 3 accumulator required by paragraph (l) of this AD, if the removal was performed before December 22, 2011 (the effective date of AD 2011-23-08, Amendment 39-16859 (76 FR 71241, November 17, 2011)), using Bombardier Alert Service Bulletin A601R-29-031, dated December 23, 2008, which is not incorporated by reference in this AD.

(5) This paragraph provides credit for replacing any inboard brake or outboard brake accumulator required by paragraph (m) of this AD, if the replacement was performed before December 22, 2011 (the effective date of AD 2011-23-08, Amendment 39-16859 (76 FR 71241, November 17, 2011)), using Bombardier Service Bulletin 601R-32-107, dated May 11, 2010, which is not incorporated by reference in this AD.

(p) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, New York Aircraft Certification Office, (ACO), ANE-170, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the ACO, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

(i) AMOCs approved previously in accordance with AD 2010-22-02, Amendment 39-16481 (75 FR 64636, October 20, 2010), are approved as AMOCs for the corresponding provisions of this AD.

(ii) AMOCs approved previously in accordance with AD 2011-23-08, Amendment 39-16859 (76 FR 71241, November 17, 2011), are approved as AMOCs for the corresponding provisions of this AD.

(2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of

Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(q) Related Information

Refer to MCAI Canadian Airworthiness Directive CF-2010-24, dated August 3, 2010, and the service bulletins specified in paragraphs (q)(1) through (q)(12) of this AD, for related information.

(1) Bombardier Alert Service Bulletin A601R-29-029, Revision B, dated May 11, 2010, including Appendix A, dated October 18, 2007.

(2) Bombardier Alert Service Bulletin A601R-29-031, Revision A, dated March 26, 2009.

(3) Bombardier Alert Service Bulletin A601R-32-103, Revision D, dated May 11, 2010, including Appendix A, Revision A, dated October 18, 2007.

(4) Bombardier Service Bulletin 601R-29-032, Revision A, dated January 26, 2010.

(5) Bombardier Service Bulletin 601R-29-033, Revision A, dated May 11, 2010, including Appendix A, dated May 5, 2009.

(6) Bombardier Service Bulletin 601R-29-035, dated May 11, 2010.

(7) Bombardier Service Bulletin 601R-29-035, Revision A, dated December 8, 2010.

(8) Bombardier Service Bulletin 601R-32-106, Revision A, including Appendix A, dated May 11, 2010.

(9) Bombardier Service Bulletin 601R-32-107, Revision B, dated December 8, 2010.

(10) Bombardier Service Bulletin 601R-32-107, Revision A, dated June 17, 2010.

(11) Canadair Regional Jet Temporary Revision RJ/186-1, dated August 24, 2010, to the Canadair Regional Jet Airplane Flight Manual, CSP A-012.

(12) Canadair Regional Jet TR RJ/186-2, dated July 7, 2011 to the Canadair Regional Jet Airplane Flight Manual, CSP A-012.

(r) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(3) The following service information was approved for IBR on [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(i) Canadair Regional Jet TR RJ/186-2, dated July 7, 2011, to the Canadair Regional Jet Airplane Flight Manual, CSP A-012.

(ii) Reserved.

(4) The following service information was approved for IBR on December 22, 2011 (76 FR 71241, November 17, 2011)).

(i) Bombardier Service Bulletin 601R-29-035, Revision A, dated December 8, 2010.

(ii) Bombardier Service Bulletin 601R-32-107, Revision B, dated December 8, 2010.

(5) The following service information was approved for IBR on November 4, 2010 (75 FR 64636, October 20, 2010).

(i) Bombardier Alert Service Bulletin A601R-29-029, Revision B, dated May 11, 2010, including Appendix A, dated October 18, 2007.

Note 3 to paragraphs (r)(5)(i), (r)(5)(iii), (r)(5)(v), and (r)(5)(vii) of this AD: In Appendix A to these documents, the document number is shown only on page A1 of these appendices.

(ii) Bombardier Alert Service Bulletin A601R-29-031, Revision A, dated March 26, 2009.

(iii) Bombardier Alert Service Bulletin A601R-32-103, Revision D, dated May 11, 2010, including Appendix A, Revision A, dated October 18, 2007.

(iv) Bombardier Service Bulletin 601R-29-032, Revision A, dated January 26, 2010.

(v) Bombardier Service Bulletin 601R-29-033, Revision A, dated May 11, 2010, including Appendix A, dated May 5, 2009.

(vi) Bombardier Service Bulletin 601R 29 035, dated May 11, 2010.

(vii) Bombardier Service Bulletin 601R-32-106, Revision A, including Appendix A, dated May 11, 2010.

(viii) Bombardier Service Bulletin 601R-32-107, Revision A, dated June 17, 2010.

(ix) Canadair Regional Jet Temporary Revision RJ/186-1, dated August 24, 2010, to the Canadair Regional Jet Airplane Flight Manual, CSP A-012.

(6) For service information identified in this AD, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-5000; fax 514-855-7401; email thd.crj@aero.bombardier.com; Internet <http://www.bombardier.com>.

(7) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(8) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Renton, Washington, on December 28, 2012.

Ali Bahrami,
Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

